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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/791,084

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Todd W. Steigerwald

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08/03/2006

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EXAMINER

NGUYEN, DONGHAI D

ART UNIT

PAPER NUMBER

3729

DATE MAILED: 08/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/791,084	STEIGERWALD ET AL.	
	Examiner	Art Unit	
	Donghai D. Nguyen	3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on May 24, 2006 has been considered and made of record. Non-elected claims 10-23 have been canceled and claims 1-9 remain pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-9 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6,411,261 to Lilly.

Regarding claim 1, Lilly discloses a method for forming an apparatus (100, see Fig. 2B) configured to reduce electromagnetic interference between a pair of antennas coupled to a wireless communication device (See Col. 1, lines 37-40 and Col. 3, lines 50-57), the method comprises: extracting a shape of the apparatus from a thin sheet of conductive material (104, 304, 804; etc.); and folding the shape into a plurality of resonant circuit elements (see Figs. 10-12), each configured to resonate at or near a carrier frequency of a signal transmitted by only one of the pair of antennas (see Col. 1, lines 28-32). Note that each of the folded elements as shown in Fig. 2B of Lilly is as broadly as readable as a resonant circuit element as claimed by present application.

Regarding claims 2-5, Lilly discloses the thin sheet of conductive material comprises a metal selected from a group comprising iron (Fe), copper (Cu), gold (Au), silver (Ag), tin (Sn), and nickel (Ni), or a metal alloy selected from a group comprising beryllium copper (BeCu), phosphor bronze (Ph+Cu/Zn/Sn), magnesium alloys (Mg/Al/O) and steel (Fe/C) and a primarily ferrous-based material is stamping and laser or chemical etching (See, Col. 4, lines 24-32). Note that since Lilly disclose the same the conductive material for forming the apparatus as claimed above. Therefore, it is inherently comprised a relative permittivity value of about 0.0 F/m to about 1.0 F/m and a relative permeability value of about 10 H/m to about 100,000 H/m.

Regarding claim 6, Lilly discloses the plurality of resonant circuit elements comprise a plurality of rectangular elements (1034 or 1134 see Figs. 10-11) connected to and arranged above a common reference plane (1004 or 1104) by a plurality of vertical segments (1006 or 1106).

Regarding claim 7, Lilly discloses a dielectric material (514) between the plurality of rectangular elements and the common reference plane.

Regarding claims 8-9, Lilly discloses the plurality of resonant circuit elements include A-shaped elements (see Fig. 7), further related Figs.8-12 show a plurality of relatively long domed elements spaced apart by a plurality of relatively thin slots.

Response to Arguments

4. Applicant's arguments filed May 24, 2006 have been fully considered but they are not persuasive. Applicants argue that "Lilly does not teach or suggest a pair of antennas nor a plurality of resonant circuit elements configured to resonate at or near a carrier frequency of a

signal transmitted by only one of the pair of antennas” (“Remarks” page 6, 1st paragraph). The Examiner disagrees because Lilly teaches the forming of an apparatus including a pair of antennas (see col. 1, lines 28-32) and a number of folded circuit elements (see Figs. 10-12) adapted for use in a wireless communication device (see Col. 3, lines 50-57). Therefore the limitations recited in claims i.e., folding ... and configured and transmitted by antennas are still met by Lilly. Further, there is no structures by process different between Lilly versus the application therefore the structure of Lilly is capable of perform the same function as configured by the present invention’s claims i.e., such as for transmitting signal by configuration the resonance at a requirement frequency similar to that as recited in claim 1.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donghai D. Nguyen whose telephone number is (571)-272-4566. The examiner can normally be reached on Monday-Friday (9:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter D. Vo can be reached on (571)-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DN

July 24, 2006


MINH TRINH
PRIMARY EXAMINER